

REMARKS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 15 and 16 are pending in this case. Claim 15 is amended by the present amendment, and support for this amendment can be found in the original specification, claims and drawings.¹ Thus, no new matter is presented.

In the outstanding Official Action, Claims 15 and 16 were rejected under 35 U.S.C. § 102(e) as unpatentable over Worrell (U.S. Patent No. 6,690,425); and Claims 15 and 16 were further rejected under 35 U.S.C. § 103(a) as unpatentable over Tani et al. (U.S. Patent No. 5,760,840, hereinafter "Tani") in view of Worrell.

In an exemplary, non-limiting embodiment of the Applicant's invention, multiple input video signals are received by the picture processing apparatus as shown in Figure 5. A data processor (5) determines whether or not an input video signal has a non-picture portion added to the periphery of the effective picture area. In operation, the picture processor (7) performs a process for placing pictures corresponding to multiple video signals at proper positions on a display (13) as shown in Figures 7C and 10D.² This process is performed by extracting a signal of the effective picture area from the input video signals for images having non-picture portions and interpolating the video signals at proper timings so that the effective image areas are displayed.³

Therefore, since the method and apparatus of the claimed invention combines the effective image areas, the images do not become excessively small during the multiple-picture display process by virtue of their non-picture portions. In this way, each respective portion of the multiple picture image areas is effectively used in its entirety during a multiple-

¹ Specification at p. 11, lines 12-23.

² Id. at least at page 14, lines 6-15.

³ Id. at least at page 14, line 25 to page 15 line 2.

picture display process as the letterbox and side panel portions of the image sources are not shown in the imaging area.

Applicants respectfully submit that amended Claim 15 states novel features clearly not taught or rendered obvious by the applied reference

Worell relates to an aspect ratio control arrangement in a video display. Specifically Worrell describes that a user is able to select a predefined aspect ratio format of a displayed image on a display device. When a change in aspect ratio format of an incoming signal occurs that would otherwise produce a distorted image, a format controller automatically overrides the user's predefined aspect ratio by establishing a different aspect ratio which allows the image to be displayed without distortion.⁴ Thus, Worrell's device receives a signal of a specific format from a single input (502), and adjusts the aspect ratio, regardless of the user's setting, so that the image is displayed on the display (506) without distortion.

However, amended Claim 15 recites, *inter alia*, a picture processing apparatus, comprising:

...an input selecting section configured to ***select a plurality of input video signals of the plurality of sources*** to be displayed...

In contrast, Worrell describes that the his device is capable of receiving an input from only a single multiple format video source (502), which may be a DVD, set-top box, high-definition television signals, etc.⁵ Thus, Worrell's system does not include a ***plurality of input video signals that are selected***, but instead only provides a plurality of input video signals from which one of these signals is selected.

Further, Worrell fails to teach or suggest at any point that signals from ***a plurality of sources*** are displayed. Instead, Worrell simply describes that the format of a single displayed video signal (see e.g., Figs. 1-4 and 6-7) may be modified so that the single signal is

⁴ Worrell at abstract.

⁵ Id. at Fig. 5, and col. 2, lines 45-55.

displayed on the display device, as discussed above. Worrell's system fails to have the capability to select a plurality of input video signals, much less the ability to displaying a plurality of signals, as recited in amended Claim 15.

Accordingly, Applicants respectfully request that the rejection of Claim 15 under 35 U.S.C. § 102(e) be withdrawn. As Claim 16 depends from independent Claim 15, it is submitted that this claim also patentably defines over Worrell for at least the reasons discussed above.

The Official Action has further rejected Claims 15 and 16 under 35 U.S.C. § 103(a) as unpatentable over Tani in view of Worrell. The Official Action cites Tani as disclosing the Applicants' invention with the exception of "receiving multiple format video sources".⁶ The outstanding Official Action cites Worrell as disclosing this feature and states that would have been obvious at the time of the invention to combine the reference teachings to arrive at Applicants' claims. Applicants respectfully traverse this rejection, as Tani fails to teach or suggest specific features recited in amended Claim 15 for which it is relied upon as a primary reference under 35 U.S.C. § 103.

Tani describes a system for automatic aspect ratio and subtitle determination in a television receiver device.⁷ Specifically, Tani describes that a single video input signal is selected (41) and analyzed using a histogram generator for detecting a luminance signal level at predefined periods and generating histograms showing the brightness level frequency distribution.⁸ These signals are then compared to determine the aspect ratio of the input signal so that the video signal may properly be displayed on the display device.

However, as discussed above, amended Claim 15 recites, *inter alia*, a picture processing apparatus, comprising:

⁶ Outstanding Official Action at p. 5, last para.

⁷ Tani at abstract.

⁸ Id. at col. 4, lines 24-47.

...an input selecting section configured to *select a plurality of input video signals of the plurality of sources to be displayed...*

In contrast, Tani describes that a single input signal is selected and displayed on the display device.⁹ Specifically, at col. 11, lines 36-38, Tani describes that a signal is received at an antenna and selected to be displayed on the display of Tani's system. Thus is in clear contrast to amended Claim 15, which recites that *a plurality of input video signals of the plurality of sources are selected to be displayed*. Tani's system is similar to Worrell above, in that a plurality of signal sources are available for selection, however only one signal source is able to be selected and displayed.

Further, amended Claim 15 recites, *inter alia*, a picture processing apparatus, comprising:

...an ID detecting portion configured to detect a picture format of the plurality of input video signals of the plurality of sources *based on additional information superimposed with the plurality of video signals of the plurality of sources...*

The outstanding Official Action fails to address the claimed feature of an “ID detecting portion”. The fundamental function of Tani's system is to determine the format of the input video signal based on the process of creating and analyzing luminescence histograms for the received signals, as discussed above. Therefore Tani's system does not include an ID detecting portion configured to detect the format of the video signals based on received additional information included with the video signals. If Tani's device were capable of determining the aspect ratio of the input video signal based on a detected ID, the process described by Tani would be unnecessary.

Finally, amended Claim 15 recites, *inter alia*, a picture processing apparatus, comprising:

⁹ Id. at Figs. 5A-5C.

...a non-signal detecting portion configured to compare *an overall level* of each of the plurality of input video signals of the plurality of sources with a predetermined level...

Claim 15 was amended to specifically recite that *an overall level* of each of the plurality of input signals are compared against a predetermined level to determine non-signal portions of the received video. In contrast, Tani describes that as many as 256 luminance signals are calculated for each received image to determine the format and content of the image.¹⁰ Clearly, this does not represent *an overall level*, but instead represents a slice by slice representation of the received video signal.

In an exemplary non-limiting embodiment, p. 13, lines 12-27 of the specification describe that the non-signal detecting portion compares a level of each video input with a predetermined level and the effective size of the picture area is detected indicating that the signal is a side-panel signal or a letterbox signal. Tani fails to teach or suggest a non-signal detecting portion whatsoever, much less compare *an overall level* of each of the plurality of input video signals of the plurality of sources with a predetermined level, as recited in amended Claim 15.

As discussed above, Tani fails to teach or suggest Applicants' above-noted claimed features recited in amended Claim 15. Likewise, Worrell fails to remedy this deficiency and therefore none of the cited references, alone or in combination, teach or suggest Applicants' Claims 15-16 which include the above-noted features by virtue of independent recitation or dependency.

Accordingly, Applicants respectfully request that the rejection of Claims 15-16 under 35 U.S.C. § 103(a) be withdrawn.

¹⁰ Id. at col. 4, lines 45-47.

Consequently, in view of the present amendment and in light of the foregoing comments, it is respectfully submitted that the invention defined by claims 15-16 is patentably distinguishing over the applied references. The present application is therefore believed to be in condition for formal allowance and an early and favorable reconsideration of the application is therefore requested.

Respectfully submitted,

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